

as illustrated in Fig. 1 can be substituted with a front, back, left side and right side panel that provides more coverage than a single or double strap.

All these are intended to be encompassed by the following claims.

What is claimed is:

1. A sandal for creating an inclination from the inner portion of the heel to the outer heel portion to adjust the axial canting of the bottom surface of the foot relative to the horizontal walking surface and to bring the foot into a biomechanically optimal position, said sandal comprising: a bottom sole layer having a top surface, a bottom surface, and a heel area; an upper middle sole layer having a top surface, a bottom surface, and a heel area; a lower middle sole layer having a top surface, a bottom surface, and a heel area; a top sole layer having a top surface and a bottom surface and a heel area; and a wedge-shaped structure, wherein said wedge-shaped structure is located between said upper middle sole layer and said lower middle sole layer near the heel area of said upper middle sole layer and said lower middle sole layer to inhibit movement of said wedge-shaped structure in said sandal, said structure defining a tilt angle α between 2 degrees and 6 degrees relative to a substantially flat horizontal walking plane.
2. The sandal of claim 1, wherein said top sole includes a strap for securing said sandal to a foot.
3. The sandal of claim 1, wherein the top sole includes a Velcro strap for securing said sandal to a foot.
4. The sandal of claim 1, wherein the top sole includes a strap having a buckle clasp for securing said sandal to a foot.
5. The sandal of claim 1, wherein the top sole includes a right elongated loop strap and a left elongated loop strap for a thong style shoe.
6. The sandal of claim 1, wherein said bottom sole is made of a moldable material.
7. The sandal of claim 6, wherein said moldable material is made from rubber, said rubber having a high density.
8. The sandal of claim 1, wherein said wedge-shaped structure is fixedly attached to said top sole and said bottom sole.
9. The sandal of claim 1, wherein said wedge-shaped structure is removably wedged between said top sole and said bottom sole.

10. The sandal of claim 1, wherein the material of said bottom surface of said bottom sole is a wear resistant material.

11. The sandal of claim 1, wherein said sandal further comprises a plurality of sublayers positioned against said top sole layer.

12. The sandal of claim 1, wherein said sandal further comprises a plurality of sublayers positioned against said bottom sole layer.

13. The sandal of claim 1, wherein said sandal further comprises a plurality of sublayers positioned against said upper middle sole layer.

14. The sandal of claim 1, wherein said sandal further comprises a plurality of sublayers positioned against said lower middle sole layer.

15. The sandal of claim 1, wherein said sandal further comprises a hollow shoe covering located on top of said top sandal layer, said shoe covering having an opening wherein a foot can be inserted and a top side panel, left side panel, right side panel, and back side panel.

16. A method for bringing the foot into a biomechanically optimal position, the method comprising: providing a sandal having a bottom sole layer having a top surface, a bottom surface, and a heel area, an upper middle sole layer having a top surface, a bottom surface, and a heel area, a lower middle sole layer, a top sole layer having a top surface and a bottom surface and a heel area, and a wedge-shaped structure, said wedge-shaped structure aligned between said upper middle sole layer and said lower middle sole layer near heel area of said upper middle sole layer and said bottom middle sole layer to inhibit movement of said wedge-shaped structure in said sandal, said structure defining a tilt angle β between 2 degrees and 6 degrees relative to a substantially flat horizontal walking plane; and placing a foot in contact with said top surface of said top sole layer.

17. A method as recited in claim 16, wherein said top sole layer includes a strap for securing said sandal to a foot.

18. A method as recited in claim 16, wherein the top sole layer includes a Velcro strap for securing said sandal to a foot.

19. A method as recited in claim 16, wherein the top sole layer includes a strap having a buckle clasp for securing said sandal to a foot.

20. A method as recited in claim 16, wherein the top sole layer includes a right elongated loop strap and a left elongated loop strap for a thong style shoe.

21. A method as recited in claim 16, wherein the bottom sole layer is made of a moldable material.

22. A method as recited in claim 16, wherein the moldable material is made from rubber, said rubber having a high density.

23. A method as recited in claim 16, wherein said wedge-shaped structure is fixedly attached to said top sole layer and said bottom sole layer.

24. A method as recited in claim 16, wherein the material of said bottom surface of said bottom sole is a wear resistant material.

25. The method as recited in claim 16, wherein said sandal further comprises a hollow shoe covering located on top of said top sandal layer, said shoe covering having an opening wherein a foot can be inserted and a top side panel, left side panel, right side panel, and back side panel.

26. The method as recited in claim 16, wherein said sandal further comprises a plurality of sublayers positioned against said bottom sole layer.

27. The method as recited in claim 16, wherein said sandal further comprises a plurality of sublayers positioned against said top sole layer.

28. The method as recited in claim 16, wherein said sandal further comprises a plurality of sublayers positioned against said upper middle layer.

29. The method as recited in claim 16, wherein said sandal further comprises a plurality of sublayers positioned against said lower middle layer.

30. A sandal for creating an inclination from the inner portion of the heel to the outer heel portion to adjust the axial canting of the bottom surface of the foot relative to the horizontal walking surface and to bring the foot into a biomechanically optimal position, said sandal comprising: a bottom sole layer having a top surface, a bottom surface, and a heel area; a top sole layer having a top surface and a bottom surface and a heel area; and a wedge-shaped structure, wherein said wedge-shaped structure is located between said bottom sole and said top sole near the heel area of said bottom sole and said top sole to inhibit movement of said wedge-shaped structure in said sandal, said structure defining a tilt angle β between 2 degrees and 6 degrees relative to a substantially flat horizontal walking plane.

31. The sandal of claim 30, wherein said top sole includes a strap for securing said sandal to a foot.

32. The sandal of claim 30, wherein the top sole includes a velcro strap for securing said sandal to a foot.

33. The sandal of claim 30, wherein the top sole includes a strap having a buckle clasp for securing said sandal to a foot.

34. The sandal of claim 30, wherein the top sole includes a right elongated loop strap and a left elongated loop strap for a thong style shoe.

35. The sandal of claim 30, wherein said bottom sole is made of a moldable material.

36. The sandal of claim 30, wherein said moldable material is made from rubber, said rubber having a high density.

37. The sandal of claim 30, wherein said wedge-shaped structure is fixedly attached to said top sole and said bottom sole.

38. The sandal of claim 30, wherein said wedge-shaped structure is removably wedged between said top sole and said bottom sole.

39. The sandal of claim 30, wherein the material of said bottom surface of said bottom sole is a wear resistant material.

40. The sandal of claim 30, wherein said sandal further comprises a plurality of sublayers positioned against said top sole layer.

41. The sandal of claim 30, wherein said sandal further comprises a plurality of sublayers positioned against said bottom sole layer.

42. The sandal of claim 30, wherein said sandal further comprises a hollow shoe covering located on top of said top sandal layer, said shoe covering having an opening wherein a foot can be inserted and a top side panel, left side panel, right side panel, and back side panel.

43. A method for bringing the foot into a biomechanically optimal position, the method comprising: providing a sandal having a bottom sole layer having a top surface, a bottom surface, and a heel area, a top sole layer having a top surface and a bottom surface and a heel area, a wedge-shaped structure, said wedge-shaped structure aligned between said bottom sole layer and said top sole layer near heel area of said bottom sole layer and said top sole layer to inhibit movement of said wedge-shaped structure in said sandal, said structure defining a tilt angle β between 2 degrees and 6 degrees relative to a substantially flat horizontal walking plane; and placing a foot in contact with said top surface of said top sole layer.

44. A method as recited in claim 43, wherein said top sole layer includes a strap for securing said sandal to a foot.

45. A method as recited in claim 43, wherein the top sole layer includes a Velcro strap for securing said sandal to a foot.

46. A method as recited in claim 43, wherein the top sole layer includes a strap having a buckle clasp for securing said sandal to a foot.

47. A method as recited in claim 43, wherein the top sole layer includes a right elongated loop strap and a left elongated loop strap for a thong style shoe.

48. A method as recited in claim 43, wherein the bottom sole layer is made of a moldable material.

49. A method as recited in claim 43, wherein the moldable material is made from rubber, said rubber having a high density.

50. A method as recited in claim 43, wherein said wedge-shaped structure is fixedly attached to said top sole layer and said bottom sole layer.

51. A method as recited in claim 43, wherein the material of said bottom surface of said bottom sole is a wear resistant material.

52. The method as recited in claim 43, wherein said sandal further comprises a hollow shoe covering located on top of said top sandal layer, said shoe covering having an opening wherein a foot can be inserted and a top side panel, left side panel, right side panel, and back side panel.

53. The method as recited in claim 43, wherein said sandal further comprises a plurality of sublayers positioned against said bottom sole layer.

54. The method as recited in claim 43, wherein said sandal further comprises a plurality of sublayers positioned against said top sole layer.

ABSTRACT OF THE INVENTION

A shoe for accommodating the normal mechanics of the foot and establishing a predetermined shape and degree of inclination for the rear foot bed includes a sandal incorporating layers of different materials in a predetermined order. One of the layers is a wedge-shaped layer that is shaped to provide an incline of between 2 and 6 degrees relative to a horizontal ground plane. The other layers of the sandal are stacked with the wedge-shaped layer to create an inclined rear foot bed. In operation, the user predetermines the angle of tilt between 2 and 6 degrees which will anatomically accommodate and correct his foot ailment and, accordingly, chooses a sandal having the preselected incline.